These curves tempt the computational number theorist not just because, like challenging mountain peaks, "they are there", but because of their remarkable properties, direct applications, and potential for suggesting new ideas for theoretical research.

— Noam Elkies

The Trivial Notions Seminar Proudly Announces

Shimura curves

A talk by Chao Li

Abstract

In the 60s, Shimura studied certain algebraic curves as analogues of classical modular curves in order to construct class fields of CM-fields. These curves were later coined "Shimura curves" and vastly generalized by Deligne. We will take a tour of the rich geometry and arithmetic of Shimura curves. Along the way, we may encounter tessellations of disks, quaternion algebras, abelian surfaces, elliptic curves with CM, Hurwitz curves... and the answer to life, the universe and everything.

Thursday November 17th, at 11:30 am Science Center 309